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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------------------|------------------|
| 10/797,212 | 03/10/2004 | John Michael Koshoffer | GE137231 | 4154 |
| 29827 | 7590 | 04/18/2007 | | |
| FRANCIS L. CONTE, ESQ. 6 PURITAN AVENUE SWAMPSCOTT, MA 01907 | | | EXAMINER CASAREGOLA, LOUIS J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3746 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 04/18/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|------------------------------|---------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/797,212 | Applicant(s) KOSHOFFER ET AL. | |
| | Examiner Louis J. Casaregola | Art Unit 3746 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-25 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-13,25 is/are rejected.
- 7) ☒ Claim(s) 1-10,14-24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC 101 & 112

Claim 25 is rejected under 35 USC 101 as reciting subject matter which overlaps two different statutory categories, and/or under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter applicants regard as their invention.

Claim 25 is drawn to a method of operating a gas turbine engine but it depends from apparatus claim 23, which is directed to engine afterburner and flameholder structure. Claim 25 is thus improper under 35 USC 101 since it is neither process nor machine but overlaps two different statutory categories. Furthermore, a single claim combining both method and apparatus is considered indefinite under 35 USC 112, second paragraph; see MPEP 2173.05(p)(II).

Claim Rejections - 35 USC 102

Claims 11 and 12 are rejected under 35 USC 102(b and/or e) as being anticipated by either Engl or Prince.

The present claims recite exhaust duct and nozzle structure that is identical to that in prior art reaction motor exhaust systems. Attention is called to the rocket exhaust duct shown in Engl's Figure 1; see the fixed area outer nozzle comprising

elements 4 and/or 5, and the inner nozzle lining comprising ablative elements 5 and/or 6. Attention is also called to the rocket exhaust duct shown in Prince's Figure 2; see the fixed area outer nozzle comprising element 110, and the inner nozzle lining comprising ablative element 112. With regard to claim 12, it is additionally pointed out that that the inner and outer nozzles in both of the cited references conform to the convergent-divergent shape described in the claim.

It is further noted that while the claimed apparatus is called a "gas turbine engine afterburner" (claims 11 & 12, first line), this title or preamble language constitutes a mere statement of intended use. The claim body includes no structure that actually defines a gas turbine afterburner, and the body only recites exhaust nozzle structure of a general type applicable to any kind of reaction motor (gas turbines, rockets, ramjets, etc.). If the exhaust nozzle structure broadly recited in the present claims is presumed capable of use in a gas turbine afterburner, then the corresponding prior art exhaust nozzle structure must be presumed equally capable.

Claim 13 is rejected under 35 USC 102(b) as being anticipated by Engl.

Attention is called to the fact that Engl's inner nozzle liner may contain a fuel (col. 3, lines 1-6). This feature meets the claimed requirement for an inner nozzle comprising a combustible material.

Allowable Subject Matter

Claims 1-10 are allowed. Claims 14-24 also contain allowable subject matter but are objected to as depending from rejected parent claims. If rewritten in independent form, claims 14-24 will be allowed.



L. J. Casaregola
571-272-4826 (M-F; 7:30-4:00)
571-273-8300 FAX
April 16, 2007

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Anthony Stashick, can be reached at 571-272-4561.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).